

# National Cooperative Soil Survey

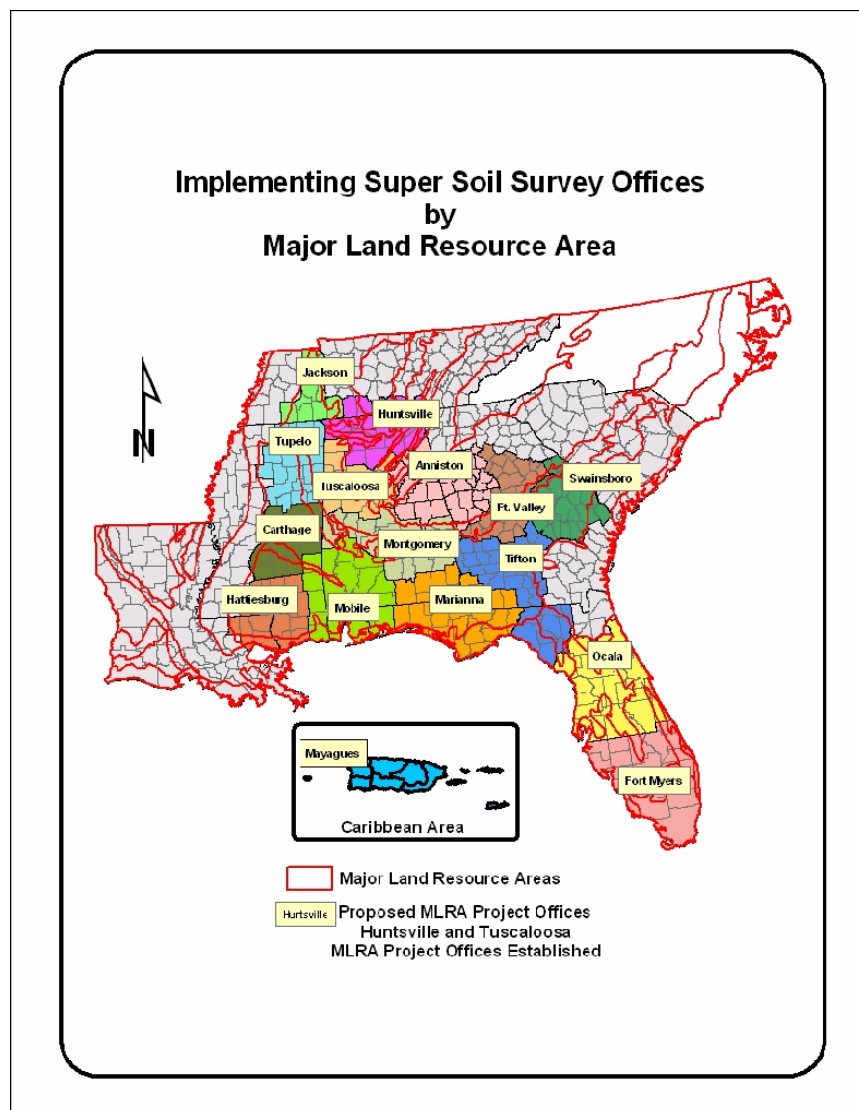
## Memorandum of Understanding (MOU)

Between

The Auburn Major Land Resource Area Office (Region 15)

and

The Cooperators in the Southeast Coastal Plain and Caribbean Area



**The National Cooperative Soil Survey  
Helping People Understand Soils through Effective Partnerships**

UNITED STATES DEPARTMENT OF AGRICULTURE  
NATIONAL COOPERATIVE SOIL SURVEY  
MEMORANDUM OF UNDERSTANDING

between the  
USDA - NATURAL RESOURCES CONSERVATION SERVICE

and the  
USDA - FOREST SERVICE

and the  
ALABAMA AGRICULTURAL EXPERIMENT STATION  
AUBURN UNIVERSITY  
ALABAMA A&M UNIVERSITY (AAMU)

and the  
FLORIDA AGRICULTURAL EXPERIMENT STATION

and the  
GEORGIA AGRICULTURAL EXPERIMENT STATION

and the  
LOUISIANA AGRICULTURAL EXPERIMENT STATION

and the  
LOUISIANA DEPARTMENT OF AGRICULTURE AND FORESTRY

and the  
MISSISSIPPI AGRICULTURAL EXPERIMENT STATION

and the  
PUERTO RICO AGRICULTURAL EXPERIMENT STATION

and the  
TENNESSEE AGRICULTURAL EXPERIMENT STATION

***RELATIVE TO THE MODERNIZATION OF ALL SOIL SURVEYS WITHIN MAJOR LAND RESOURCE  
REGION***

***15- SOUTHEAST COASTAL PLAIN AND CARIBBEAN AREA***

**AUTHORITY:** Public Law 74-46, 49 Stat. 163 (16 U.S.C. 590 a-f) and Public Law 89-560, 80 Stat. 706 (42 U.S.C. 3271-3274).

## **I. PURPOSE:**

The Natural Resources Conservation Service (NRCS) and National Cooperative Soil Survey partnerships are a part of the Board of Directors for this region. This group has a common objective of providing service to soil survey program participants in an effective and efficient manner.

The purpose of this Memorandum of Understanding (MOU) is to encourage cooperation and to outline how the Board of Directors will work together. Effective cooperation within the Board will improve their respective abilities to provide service to the soil survey program participants, as well as significantly advance the individual partnership mission.

This MOU will help to ensure that soil mapping, update, modernization, and interpretation are conducted according to common standards within the Southeast Coastal Plain and Caribbean Area Soil Survey Region. Consequently, it serves as the guidance document for developing individual soil survey project memoranda of understanding (work plans) within the region. Project MOUs (work plans) contain the technical standards, specifications, publication plans, staffing plans, and schedules for completing a specific project soil survey. Project MOUs also describe any specific responsibilities of cooperators as related to that project. Trust fund agreements or reimbursements between agencies or local units of governments for projects would be covered by separate agreements. This MOU supercedes MLRA MOUs within this region upon final signature.

Another purpose of this MOU is to provide a mechanism to facilitate interaction and communication between state soil survey programs and their cooperators and the MLRA Soil Survey Regional Office 15 (MO-15). Agreements or contracts between the parties will be developed under this MOU. The purpose is to establish a MOU for all soil survey activities within MO 15 which will encourage cooperation and outline how the National Cooperative Soil Survey (NCSS) Partnership will work together. Effective cooperation between partners will improve their respective abilities to provide service to the soil survey program as well as advance the mission of each participant. This document will serve as an umbrella agreement for all local agreements. The chair of the MO-15 Board of Directors will serve as point of contact for NRCS. Members of the Board of Directors from each state will serve as the point of contact for Cooperators in their respective states.

## **II. JUSTIFICATION STATEMENT:**

More comprehensive soil and site data will enable decision makers to make more informed environmental assessments and resource management decisions in regard to (1) managing public and private land, (2) protecting water quality and conserving water quantity, (3) improving and maintaining stated land uses [e.g. cropland, urban land, forestland, etc.], (4) developing wildlife habitat, (5) preparing watershed and urban plans, and (6) providing community and rural development soil interpretations and potentials.

## **III. BACKGROUND:**

The mission of the National Cooperative Soil Survey is to assist humankind in understanding and wisely using soil resources to achieve and sustain a desirable quality of life. This mission will be achieved by maintaining a strong scientific basis for defining and describing soil landscape relationships important to the use and management of soils; by providing scientific expertise to identify, classify, characterize, correlate, and interpret soils; by making the results of field investigations, remote sensing, and laboratory information and its interpretation readily available through texts, maps, digital products, and other databases; and by assisting people in the use of soil survey information.

#### **A. Mission of the Natural Resources Conservation Service - Soil Survey Program**

The NRCS is responsible for the leadership of soil survey activities in the U.S. Department of Agriculture, for the leadership and coordination of activities of the National Cooperative soil Survey (NCSS) and for the extension of soil survey technology to global applications. Additional information about the NCSS is given in the NRCS General Manual Title 430, Part 402.

#### **B. Mission of the Agricultural Experiment Stations and State Partners:**

The responsibilities of the various agricultural experiment stations and state agencies will vary from state to state depending upon enabling legislation, the traditions under which they evolved, and each organizational position within the state. All function as a basic source of scientific information on soils in their respective state.

### **IV. BENEFITS:**

This MOU serves as a **blanket document** for the Major Land Resource Area Soil Survey Region (MLRA) 15 Office. It will enable the MLRA office to conduct business, such as coordinating and continuing modernization efforts for the 250 soil surveys within the business area.

- Modernization efforts will be based on state needs in accordance with National Cooperative Soil Survey (NCSS) Standards at a scale of 1:24,000 or 1:12,000 (for Puerto Rico, 1:20,000).
- Modernization efforts will include the study of and refinement of MLRA boundary line placement to improve its relation with other natural resource boundaries, such as physiography, climate, precipitation, landform, geology, landscape, and hydrologic units, between and within the MLRA region.
- Provides regional coordination, technical leadership, and support in the development, production, quality assurance, and delivery of scientifically based soil information.

### **V. DESCRIPTION OF THE WORK AREA:**

Major Land Resource Area (MLRA) Soil Survey Region 15 consists of approximately 101.8 million acres and includes parts of four Land Resource Regions (LRR): (P) South Atlantic & Gulf Slope Cash Crops, Forest, and Livestock; (T) Atlantic and Gulf Coast Lowland Forest and Crop; (U) Florida Subtropical Fruit, Truck Crop, and Range; and (Z) Caribbean Region. These LRRs include portions of Alabama, Florida, Georgia, Mississippi, Louisiana, Tennessee, and the Caribbean area. The major land uses in this region are forestland, livestock, truck crops, citrus fruit, and poultry production. Other uses include urban land, cotton, peanuts, coffee, pasture, and hayland. A few areas are used as orchards or vineyards or are used for small grains. The average age of the soil surveys in this region is 25 years. The MO-15 Regional Office has responsibility for all or parts of 13 Major Land Resource Areas.

**LAND AREA  
ACREAGE TOTALS\***

<b>States</b>	<b>Private Land</b>	<b>U.S. Forest Service</b>	<b>Native American Land</b>	<b>National Park Service</b>	<b>Other Federal Land</b>	<b>Census Water</b>	<b>Total All Categories</b>
<b>Alabama</b>	26,319,240	666,081	440	2,700	131,700	429,460	27,314,900
<b>Florida</b>	27,803,520	651,600	81,966	35,400	907,214	2,500,900	31,980,600
<b>Georgia</b>	14,010,325	0	0	575	108,000	99,600	14,218,500
<b>Louisiana</b>	1,734,400	0	0		25,900	181,300	1,941,600
<b>Mississippi</b>	28,400,800	0	16,000	0	1,769,700	356,800	30,527,300
<b>Tennessee</b>	2,350,343	0	0	5,384	2,173	19,600	2,377,500
<b>Puerto Rico</b>	22,344,133	279,940		7,646	546,800	9,245	23,187,764
<b>USVI</b>	76,032	147	0	7,671	680	0	84,480
<b>Total</b>	<b>94,666,394</b>	<b>1,597,768</b>	<b>98,406</b>	<b>59,376</b>	<b>1,724,237</b>	<b>3,240,462</b>	<b>101,135,871</b>

\* Acreages adjusted to coincide with MLRA Soil Survey Region 15 boundary. Values are close approximations.

## **VI. ROLES AND RESPONSIBILITIES:**

Roles and responsibilities of the Region 15 MLRA Office and State's are defined in the General Manual, 430-SOI, Amendment 1 (Part 402.10, subpart B, (3), (5), (6) and (7), dated September 24, 1999. An exception is in part (3) regarding supervision of MLRA Soil Survey Project Leaders. Individual States will continue to be responsible for the supervision of soil scientists working in their respective state unless they request otherwise.

The Board of Directors will cooperate in the conduct of projects in accordance with the Memoranda of Understanding governing soil surveys in the designated states. Technical responsibilities are identified in this section. Administrative responsibilities for the acquisition of such things as financial resources, human resources, equipment, office space, vehicles, and other in-kind services are also indicated. The Board of Directors commitment is contingent upon cooperative agreements and trust fund agreements developed by states with local units of government or members, including the private sector.

A Steering Committee for each MLRA within MO-15 region will develop a project plan, direct project activities and resources, develop quality control standards, develop MLRA soil survey evaluation of legends, and coordinate the surveys. The MO-Leader for Region 15 will chair the committee. The committee will be composed of the State Soil Scientist and one or two representatives from each state within the region, MLRA project leaders, and a representative from the Land Grant Universities. Ad hoc/advisory members will include Resource Soil Scientists and members of other disciplines as needed.

### **A. It is agreed that the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) will:**

1. Furnish staff, equipment, office space, and vehicles.
2. Work with local and state units of government to develop cost-sharing agreements for modernizing project soil surveys.
3. Be the lead agency for the project soil survey.
4. Provide the controlled base imagery and supporting cartographic materials for field mapping and publication.

5. Characterize the soils by laboratory analyses.
6. Develop sampling plans and conduct soil investigations in cooperation with partners.
7. Prepare the soil survey manuscripts.
8. Complete the map compilation, digitizing, SSURGO certification, and digital map finishing for all soil surveys in the region.
9. Conduct soil survey evaluations by MLRAs.
10. Promote consistent progressive soil correlation across the region.
11. Conduct field reviews, provide field assistance, and prepare trip reports, field review reports, and correlation documents.
12. Ensure quality control and provide quality assurance throughout the survey area.
13. Cooperate with other agencies in providing public information regarding progress of the survey, uses of soil survey information, and distribution of the published report.
14. Provide technical leadership for development of Geographic Information Systems.
15. Coordinate all soil survey activities across the region and between other regions for acceptable/exact joins.

**The Agricultural Experiment Stations and Land Grant Universities in Alabama, Florida, Georgia, Louisiana, Mississippi, Puerto Rico, Tennessee and United States Virgin Islands will:**

1. Perform research in soil genesis, soil morphology, and soil classification.
2. Participate in quality assurance reviews and soil correlation conferences.
3. Provide guidance and assistance in other phases of the project.
4. Serve as members of individual MLRA Steering Committees
5. Characterize the soils by laboratory analyses
6. Participate in Region 15 annual Board of Directors management information meeting.

**C. The USDA Forest Service will:**

1. Participate in quality assurance reviews, field studies, and soil correlation for project soil surveys containing Forest Service lands.
2. Cooperate in educational and informational programs regarding the proper use of soil resources.
3. Cooperate in the conduct of the National Cooperative Soil Survey by allowing access to intermingled lands and by conducting soil survey on the lands under the jurisdiction of the Forest Service.
4. Cooperate in assuring exact or acceptable joins between areas.
5. Share available soil moisture, soil temperature, and woodland data.
6. Reimburse NRCS for the full cost of conducting soil surveys on the lands under the jurisdiction of the Forest Service.

**VII. STAFFING AND OTHER PROGRAM NEEDS:**

- Individual states will work with their partnership to develop a soil survey modernization and update work plan that determines staff needs, position types, and starting and completion dates. Those partnerships will assist in establishing 16 Super MLRA Project Offices with functional office space. These offices will have similar staff structure and equipment as offices; they will all be within MO-15 region.
- Individual states will develop and conduct training of project members and ensure that all soil scientists within the MLRA project are adequately trained in the principles and application of soil survey, techniques of field mapping, updating existing surveys, documentation of soil mapping, and map unit concepts. Individual states will ensure that all staff members are trained in data collection and use of data in correlation and its interpretation for users. Individual states will ensure that soil scientists are

trained in map development, including map compilation, map finishing—manually and digitally as appropriate, new technology, and development of soil survey manuscripts.

- Individual states will provide training about the MLRA Soil Survey concept to employees so they can better understand the following:
  - Managing an MLRA Project Office
  - Analyzing and evaluating existing soil surveys data by MLRA
  - Developing an MLRA or other region project plan
  - Applying MLRA standards and procedures for gathering field data
  - Developing soil survey identification legends by MLRA
  - Following the roles and responsibilities of the MLRA project leader and team members
  - Utilizing new technology for MLRA and other region project development and delivery
  - Designing a marketing strategy for MLRA and other region soil survey information delivery

## **VIII. COOPERATING AGENCIES WILL:**

Develop and implement laboratory and field investigative techniques and studies as required from a MLRA perspective. Such studies could include analyzing surface horizons by land use, eroded soils, drainage classes, ground water quality, temperature and moisture regimes, water table depths and duration, and the MLRA boundary. Resource Soil Scientists will assist as needed for special field studies, data collection, and project coordination.

## **IX. CORRELATION DOCUMENTS:**

The MO-15 Leader and the State Conservationist from applicable states will sign the correlation documents for the MLRA survey area and for subsets within the region.

## **X. SPECIFICATIONS:**

The product expected of the update is a coordinated, and joined, digitized soil survey at a scale of 1:24,000 or 1:12,000 with accompanying attribute soils data in the National Soil Information System (NASIS). All digital data development will be in accordance with the National Soil Survey Handbook, part 647. Digitized data will not be copyrighted. NRCS reserves the right to archive and distribute data generated under the terms of this Memorandum of Understanding.

- Map units will be consociations, complexes and undifferentiated groups, as applicable. The minimum size for delineation will be about 5 acres at 1:24,000 and 1:20,000 and 1 to 3 acres at 1:12,000.
- The project will minimize the impact of political and administrative boundaries in the fieldwork, data collection, and data presentation.
- The survey area is MLRA Region 15. Sufficient field documentation will be collected to characterize and describe the map unit concepts as to name, composition, setting, and interpretation. Sufficient field checking of map units in the survey area will be made to ensure that delineations meet the map unit criteria, i.e. the map unit delineations are as described and will interpret as stated in the map unit descriptions and tables. The taxonomic classes selected to name map units will be represented by a typical pedon within an MLRA survey area.

## **XI. INFORMATION NECESSARY TO ORGANIZE AND PLAN THE WORK:**

Specific dates for planning and managing the work will be maintained in the soil survey schedule. Plans are contingent on funding. Some special studies may extend beyond these dates. Modernization of soil surveys is currently in progress for county subsets by MLRA throughout the region.

## **XII. PUBLICATION PLANS:**

The Natural Resources Conservation Service, unless specified otherwise by amendment to this memorandum of understanding, will be responsible for preparing the manuscript materials, text, maps, interpretations for the project soil survey, and publication media (such as CD, DVD, or Web pages). States reserve the right to publish their soil surveys as single county or multi-county reports.

## **XIII. CONTRIBUTION AGREEMENTS:**

Individual contribution agreements and/or memorandum of understanding may be developed by states with a county or group of counties, recognized tribes, and other partners as needed to identify special needs or clarify reimbursable, cost share, or other working agreements.

## **XIV. LIFE OF AGREEMENT:**

This MOU will remain in effect as long as all parties or individual states have an active soil survey program.

## **XV. PROVISION TO RENEW, TERMINATE, AND SUSPEND:**

This MOU supercedes all previous work plans. This agreement may be amended, extended, or modified by a written amendment to the agreement through an exchange of correspondence between authorized officials provided such amendment does not extend this agreement beyond the close of the fiscal year in which the work is completed.

## **XVI. NOTICES:**

Any written notice under this agreement shall be addressed to the following individuals:

State Conservationist, NRCS-Alabama  
Chair, MLRA Regional 15 Board of Directors  
3381 Skyway Drive  
P.O. Box 311  
Auburn, AL 36830

USDA, Natural Resources Conservation Service  
Director, National Soil Survey Center  
100 Centennial Mall North  
Federal Building, Room 152  
Lincoln, NE 68508-3866

USDA, Natural Resources Conservation Service  
Director, Soil Survey Division  
P.O. Box 2890, Room 4250 South Building  
Washington, D.C. 20013-2890



## **XVII. NON-DISCRIMINATION STATEMENT:**

By signing this agreement, the recipient assures the Department of Agriculture that the program or activities provided for under this agreement will be conducted in compliance with all applicable Federal civil rights laws, rules, regulations, and policies.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum Of Understanding:

The NRCS signatories are the State Conservationists and MO-15 Team Leader in MLRA Soil Survey Region 15. Other signatories are the Directors of Agricultural Experiment Stations and the State and Federal agency cooperators.

APPROVAL  
MLRA Region-15 Office MOU  
Signatures for Alabama

Signed Robert M. Jones  
State Conservationist  
USDA-Natural Resources Conservation Service  
Auburn, AL

5/17/04  
Date

Signed John Jensen  
Director, Dr. John Jensen  
Alabama Agricultural Experiment Station  
Auburn, AL

3/25/04  
Date

Signed Stephen R. Richardson  
Forest-Supervisor,  
USDA, Forest Service  
Montgomery, AL

2/2/04  
Date

Signed Charles Love  
MLRA Region-15 Team Leader  
USDA Natural Resources Conservation Service

5/3/04  
Date

APPROVAL  
MLRA Region-15 Office MOU  
Signatures for Caribbean Area

Signed \_\_\_\_\_

Director  
USDA Natural Resources Conservation Service

Signed \_\_\_\_\_

Dean and Director,  
College of Agricultural Sciences,  
University of Puerto Rico - Mayaguez Campus

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

**APPROVAL**  
**MLRA Region-15 Office MOU**  
**Signatures for Florida**

Signed T. Miles Glasgow  
State Conservationist  
USDA Natural Resources Conservation Service

1/7/04  
Date

Signed [Signature]  
Director  
Florida Agricultural Experiment Station

1/22/04  
Date

APPROVAL  
MLRA Region-15 Office MOU  
Signatures for Georgia

Signed   
State Conservationist  
USDA Natural Resources Conservation Service

4/14/64  
Date

Signed   
Director  
Georgia Agricultural Experiment Station

6 Apr 64  
Date

**APPROVAL**  
**MLRA Region-15 Office MOU**  
**Signatures for Louisiana**

Signed Donald W. Gohmert  
State Conservationist  
USDA Natural Resources Conservation Service

3/23/04  
Date

Signed W. H. Brown & William B. Richardson, Chancellor, LSU  
Director Agricultural Center for Bd. of  
Louisiana Agricultural Experiment Station Supervisors, LSU and A&M College

3/15/04  
Date


Signed Paul Delany  
Commissioner  
Louisiana Department of Agriculture and Forestry

1/28/04  
Date

APPROVAL  
MLRA Region-15 Office MOU  
Signatures for Tennessee

Signed   
State Conservationist  
USDA Natural Resources Conservation Service

2-5-04  
Date

Signed   
Dr. Jack H. Britt, Vice President  
Institute of Agriculture

2-3-04  
Date

**APPROVAL**  
**MLRA Region-15 Office MOU**  
**Signatures for Mississippi**

Signed Homer L. Wister  
State Conservationist  
USDA Natural Resources Conservation Service

1-22-04  
Date

Signed William L. Kingery  
Director  
Mississippi Agricultural Experiment Station

5/13/04  
Date